

**Old Colony Railroad Rehabilitation Project  
Greenbush Line Restoration  
Towns of Braintree, Cohasset, Hingham,  
Scituate and Weymouth**

**Section 106 Consultation  
Programmatic Agreement**

Programmatic Agreement (*Agreement*) by and among the United States Department of the Army, Corps of Engineers, New England District (*Corps*), the Massachusetts State Historic Preservation Officer (*SHPO*), the Advisory Council on Historic Preservation (*Advisory Council*), the Massachusetts Bay Transportation Authority (*MBTA*), and those Towns whose chief executive officer(s) may elect to execute this Agreement, as evidenced by their signature at the end hereof (the latter such parties referred to as the *Concurring Parties*).

**Recitals**

WHEREAS, 1, the MBTA proposes to restore commuter rail passenger service on the Old Colony railroad branch known as the Greenbush Line in the towns of Braintree, Weymouth, Hingham, Cohasset, and Scituate, Massachusetts (the *Greenbush Line Restoration Project* or *Project*).

WHEREAS, 2, the Corps, which is charged with regulating certain discharges of dredged or fill material to waters of the United States through a permit authorized pursuant to Section 404 of the Clean Water Act, has determined that portions of the Project's construction activities, including track work, certain station construction and certain construction or reconstruction of roadways associated with the Project, will occur in areas regulated by the Corps and thus requires that the Corps issue its Section 404 Permit under Section 404 (the *Section 404 Permit*).

WHEREAS, 3, in accordance with Section 106 of the National Historic Preservation Act (*NHPA*), 16 U.S.C. 470f (*Section 106*), and with regulations implementing Section 106 issued by the Advisory Council and codified at 36 C.F.R. Part 800, as amended (December 12, 2000) (*36 C.F.R. Part 800*) and regulations issued by the Corps and codified at 33 C.F.R. Part 325, Appendix C, the Project subject to the Section 404 Permit constitutes the "undertaking" and is subject to Section 106 (the *Undertaking*).

WHEREAS, 4, in accordance with Section 106, the SHPO is responsible for consulting with and advising and assisting the Corps and the other parties and the public in the Section 106 process and, under Massachusetts General Laws, Chapter 9, Sections 26 et

seq. (the *Massachusetts Historical Commission Act*), and regulations implementing the Massachusetts Historical Commission Act at 950 C.M.R. Part 71, the Massachusetts Historical Commission is responsible for consulting the MBTA to resolve adverse effects of the Project and in addition, under M.G.L. Chapter 9, Sections 26A and 27C, and 950 C.M.R. Part 70, the Massachusetts State Archaeologist is responsible for overseeing and regulating the investigation and preservation of archaeological sites and specimens (*State Archaeologist*).

WHEREAS, 5, in furtherance of the requirements of Section 106 and of other provisions of the NHPA, including Section 110(f) which addresses avoidance or minimization of Adverse Effects on Historic Properties that are National Historic Landmarks (*Section 110(f)*), the Corps, based on information generated by the MBTA and by in others participating at the Corps' invitation in the Section 106 review process for the Project, and in consultation with SHPO, has determined the Area of Potential Effect associated with various impacts of the Project (*APE*), and has identified historic properties within the APE, as that term is defined in 36 C.F.R. 800.16(l) (*Historic Properties*).

WHEREAS, 6, the APE is graphically depicted on the U.S.G.S. topographical maps included in Appendix E of the *CE&M Report* (see WHEREAS 9, below).

WHEREAS, 7, MBTA, in consultation with the Corps, SHPO, the State Archaeologist, and other consulting parties has, as of the date of this Agreement, performed certain archaeological identification and evaluation surveys with respect to potential below-ground historic resources which may be adversely impacted by construction of the Project, which surveys are described in Archaeological Reports which are referenced at *Attachment A* to this Agreement, and certain additional investigations will be performed in the ordinary course of Project development as plans and designs are finalized.

WHEREAS, 8, based on the Section 106 consultation conducted by the Corps and on the information generated by the MBTA and others, which was reviewed and evaluated during the Section 106 consultations, the Corps, in consultation with SHPO and the other consulting parties, has applied the Advisory Council's criteria of adverse effect (see 36 C.F.R. 800.5(a)) and has found that the Greenbush Project will have Adverse Effects (as the term "*Adverse Effects*" is defined in 36 C.F.R. Part 800) on certain identified Historic Properties.

WHEREAS, 9, the Corps' determination of the APE, identification of Historic Properties within the APE, assessment of Adverse Effects and findings regarding the effects of the Project on Historic Properties have been documented, in a report prepared by the MBTA at the request of the Corps dated February \_\_, 2001 and entitled "Cultural Resources - Comprehensive Effects and Mitigation Report - Braintree, Weymouth, Hingham, Cohasset and Scituate - Greenbush Line Section 106 Review - Final Environmental Impact Report - Old Colony Railroad Rehabilitation Project" (*CE&M Report*), which is attached to this Agreement at *Attachment B* and the Corps' determinations and findings in this regard have been further confirmed in the Corps' correspondences addressed to SHPO and circulated to the Section 106 consulting parties dated February 2, 2000, March 3, 2000, April 13, 2000,

May 11, 2000, June 6, 2000, June 6, 2000, and January 16, 2001, all of which are enclosed with the CE&M Report at its Appendix C.

WHEREAS, 10, the Corps findings of effects of the Project, including Adverse Effects, are specifically set forth in the CE&M Report at Chapter 4, Section C, and presented in tabular form at Table 4.1 of the CE&M Report.

WHEREAS, 11, the Corps, in consultation with SHPO and the other parties participating in the Section 106 review process, has determined that based on the Adverse Effects to Historic Properties which have been documented in the CE&M Report, certain measures to avoid, minimize or mitigate Adverse Effects on Historic Properties, as further described in such Report, should be incorporated as part of the Section 404 Permit, in accordance with and as set forth in this Agreement.

WHEREAS, 12, the specific measures to resolve Adverse Effects proposed with respect to each identified Historic Property for which an Adverse Effect has been determined is presented in tabular form at Appendix A to the CE&M Report.

WHEREAS, 13, as a result of the archaeological investigations conducted to date (see *Attachment C* to this Agreement), the MBTA has recommended and the Corps, SHPO and State Archaeologist have concurred (see correspondence from the Corps to SHPO dated October 18, 2000, which is included in the CE&M Report at Appendix C) that based on the project plans reviewed in such investigations, there will be Adverse Effects to the Cohasset Railroad Roundhouse Site in Cohasset Village, and that measures to resolve such Adverse Effects to this site are warranted, as further described in the CE&M Report (Chapter V. E. 4.b).

WHEREAS, 14, the plans for the Project, including proposed measures to resolve Adverse Effects on Historic Properties, which have been reviewed in the context of the Section 106 consultation evidenced in this Agreement, are depicted graphically on Plan sheets dated which are attached as Appendix D to the CE&M Report (*Project Plans*).

WHEREAS, 15, the Corps, SHPO and the MBTA have also undertaken, both within the Section 106 consultation and as part of the on-going review of environmental and other impacts required pursuant to the National Environmental Policy Act (*NEPA*), Section 404(b) of the Federal Clean Waters Act, the Massachusetts Environmental Policy Act (*MEPA*), and the Massachusetts Historical Commission Act, a concerted and good faith effort to resolve Adverse Effects to Historic Properties, including evaluation of alternatives to the proposed action, and consideration of various options to resolve Adverse Effects, including the development by MBTA of conceptual designs for the Project which incorporate design standards to preserve and protect Historic Properties, as further described in this Agreement and in the CE&M Report.

WHEREAS, 16, the MBTA's design standards for the Project include the development of plans and specifications which are protective of Historic Properties,

including certain Historic Preservation Design Guidelines which are referenced in the Stipulations under this Agreement, and including, among other provisions, standards proposed by the MBTA to enable the Project to be operated while avoiding the blowing of horns or whistles as trains approach Greenbush Line grade crossings, except in emergency or temporary situations, which the MBTA believes to be in accordance with prevailing policies of the Federal Railroad Administration (*FRA*) and applicable state law in this regard, it being understood that the MBTA must comply with federal and state laws and regulations concerning blowing of horns or whistles, including the Swift Act and any rules or regulations of the FRA eventually adopted to implement the Swift Act.

WHEREAS, 17, as part of the overall environmental as well as historic impact review and planning effort referenced above, MBTA has conducted separate planning discussions regarding measures to resolve Adverse Effects with the various localities within whose jurisdictions the Project will be completed, including discussions with the Towns of Braintree, Weymouth, Hingham, Cohasset and Scituate.

WHEREAS, 18, as a result of its discussions with Hingham, MBTA, Hingham and the Executive Office of Transportation and Construction (*EOTC*) reached consensus that certain measures to resolve Adverse Effects should be taken, specifically including, but not limited to, measures to resolve Adverse Effects on Historic Properties within the Lincoln National Register Historic District, and such consensus has been documented in the Memorandum of Understanding by and among Hingham, MBTA and EOTC, dated as of May 15, 2000 (*Hingham MOU*).

WHEREAS, 19, the Corps, SHPO, and Advisory Council did not participate in the MBTA's discussions with Hingham leading to the Hingham MOU, and the Hingham MOU is not a part of this Agreement, but certain of the items in the Hingham MOU have been included as Section 106 measures to resolve Adverse Effects and are incorporated as measures to resolve Adverse Effects, see Stipulation IX.A. and the CE&M Report at Appendices A, Location-Specific Mitigation, and D, Project Plans.

WHEREAS, 20, the Corps, in coordination with SHPO and MBTA, has undertaken public outreach efforts in support of the Section 106 consultation, such as extending invitations to participate in these consultations to various elected officials and appointed representatives of communities affected or potentially affected by the Project, the Tribal Historic Preservation Officer (THPO) for the Wampanoag-Aquinnah Tribe, including Native American representation such as the Executive Director of the Massachusetts Commission on Indian Affairs and have also conducted open public meetings in each of the five towns in which the Project right-of-way is located (Braintree, Cohasset, Hingham, Scituate and Weymouth) in order to obtain citizen comment on the proposed Project, on potential effects and Adverse Effects on Historic Properties occasioned by the Project, and on potential Measures to resolve Adverse Effects of such Effects and has considered these comments.

WHEREAS, 21, the Towns of Braintree, Cohasset, Hingham, Scituate and Weymouth have been invited to participate and have participated in the Section 106

consultation process and have been invited to concur in this Agreement, and certain, but not all, of these Towns have elected to concur in this Agreement as evidenced by their signatures at the end of this Agreement, it being understood that wherever reference is made in this Agreement to a Town, the authorized representatives for all purposes related to this Agreement shall be the Boards of Selectmen of the Towns of Braintree, Hingham, Cohasset and Scituate and the Mayor of the Town of Weymouth.

WHEREAS, 22, in accordance with Section 110(f), the Corps and the MBTA, to the maximum extent possible, and based on the Section 106 consultation, have undertaken planning of the Project to avoid and/or to minimize any harm to the two National Historic Landmarks within the Area of Potential Effect (the General Benjamin Lincoln House and the Old Ship Meetinghouse, both of which are located within the Lincoln National Register Historic District in Hingham, Massachusetts);

NOW, THEREFORE, the Corps, SHPO, the Advisory Council and the MBTA, together with the Concurring Parties executing this Agreement, agree that the Undertaking shall be implemented by MBTA in accordance with the following Stipulations in order to take into account the effects of the Project on Historic Properties.

### **Stipulations**

The MBTA shall ensure that the measures set for the below are carried out, including without limitation, the measures to resolve Adverse Effects at the CE&M Report, Appendices A and D. The Corps shall include the provisions of this Programmatic Agreement as a term and condition of its Section 404 Permit, and the Corps has the authority to enforce the terms of this Agreement as a condition of the Section 404 Permit.

#### **I. GENERAL DESIGN STANDARDS TO RESOLVE PROJECT EFFECTS ON HISTORIC PROPERTIES**

During completion of the Project design and engineering, MBTA shall incorporate the following design standards to ensure that Project components are responsive to the significant historic, architectural and engineering features of affected Historic Properties, to the extent feasible and with due regard for public safety, MBTA's operational requirements, cost and maintenance:

A. Avoid, minimize or mitigate effects of the rail infrastructure and operations on adjacent properties by balancing historic preservation values with Project goals and objectives.

B. Where the Project requires the rehabilitation of Historic Properties or other work intended to be within the scope of the U.S. Secretary of the Interior's *Standards for the Treatment of Historic Properties, including Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* (for convenience called in this Agreement the "*U.S. Interior Secretary's Standards*"), such as (but not

limited to) the installation of sound insulation at an Historic Property, MBTA shall adhere to the U.S. Interior Secretary's Standards to the extent feasible.

C. Ensure compatibility with the historic and architectural qualities of adjacent historic districts, buildings and structures which are listed in or eligible for listing in the National Register.

D. Develop design solutions that are responsive to the unique program and contextual requirements of the Greenbush Project yet sympathetic to the existence and appearance of Historic Properties within the immediate surroundings.

E. Ensure that the existing appearance and condition of Historic Properties are documented so as to preserve the existing settings and character of place of Historic Properties, as further set forth in this Agreement at Stipulation XVIII.

F. Ensure the involvement of the Corps, SHPO, Towns and Project Conservator during the consideration of design alternatives so that historic preservation issues are identified early in the process and considered while fulfilling the long-term goals of the Project and community.

G. Adhere, in addition to the general standards set forth above, to the design standards set forth in the *Historic Preservation Design Guidelines* which are set forth at *Attachment A* to this Agreement and which are also discussed at Chapter 5, Section C.4 of the CE&M Report, which is attached to this Agreement at *Attachment B*.

## II. RIGHT-OF-WAY MITIGATION

A. During the completion of Project design and engineering, the MBTA shall continue to design Project right of way improvements in a manner that avoids and/or minimizes land acquisitions (whether by purchase, takings or otherwise) and relocations of residential and commercial Historic Properties, including utilizing the former Greenbush Line rail right-of-way and existing street or highway rights-of-way to the extent feasible and with due regard for public safety, MBTA's operational requirements, cost and maintenance.

B. In the event that relocation of any Historic Properties is proposed by MBTA as part of the design of the Project, the MBTA will consult with the affected property owner(s) and Project Conservator to evaluate alternative sites and the measures that will be taken to preserve the property during the physical move, and then with the Corps and SHPO prior to any determination to incorporate such relocation(s) in the final design and engineering documents for the Project. In the event that any relocation is included in the final documents for the Project, the Corps, in consultation with SHPO, shall redetermine whether the Historic Property as relocated continues to qualify for National Register listing or eligibility.

C. The rail right-of-way shall be constructed utilizing measures to resolve

Adverse Effects of vibration impacts to Historic Property structures as set forth at Stipulation XII.A, below (Construction Activities Planning and Management).

### **III. MITIGATION AT STATIONS AND PARKING AREAS**

A. During the completion of Project design and engineering, the MBTA shall continue to design Project stations and parking areas in a manner which avoids and/or minimizes land acquisitions and relocations of residential and commercial Historic Properties for stations and parking areas to the extent feasible and with due regard for public safety, MBTA's operational requirements, cost and maintenance.

B. In the event that after commencement of Greenbush Line revenue service and during the Term of this Agreement (see Stipulation XXII.B.), the MBTA determines that additional or expanded parking facilities are required which are not otherwise proposed in the Project Plans or in the Design Submissions, the MBTA will consult with the Project Conservator and then coordinate with Corps, SHPO and the affected Town regarding MBTA's plans and designs to accommodate such requirements with respect to any previously unanticipated Adverse Effects on Historic Properties that may arise in establishing such facilities, and measures to resolve such Adverse Effects.

C. In such event (see Paragraph B., immediately above), the MBTA shall coordinate with the affected Town, SHPO and the Corps to develop additional measures to resolve such Adverse Effects. If, following such coordination, the Corps, SHPO and MBTA agree regarding the additional measures, the MBTA shall implement them. If the MBTA, Corps and SHPO are unable to reach agreement, the matter may be referred for dispute resolution set forth at Stipulation XV of this Agreement.

D. The MBTA shall include, as part of the appropriate Design Submissions called for under Stipulation VIII, below, internal landscaped areas at those station parking facilities which are located within or which are visible from Historic Properties for purpose of enhancing measures to resolve visual and setting Adverse Effects arising from the presence of such facilities, with due regard for public safety, MBTA's operating requirements, cost and maintenance.

E. Prior to the commencement of revenue passenger service, the MBTA shall submit to the Corps, SHPO, Towns and Project Conservator a maintenance plan which describes the practices and procedures to be used by MBTA and/or its contractors in the operation of stations and parking areas with regard to implementation of the measures to resolve Adverse Effects required under this Agreement.

#### IV. GRADE CROSSING MITIGATION

A. During the completion of the plans and specifications for the Project, the MBTA shall continue to design the Project in a manner that avoids the blowing of horns or whistles as trains approach grade crossings, except in emergency or temporary situations.

B. During the completion of Project design and engineering, the MBTA shall continue to design Project grade crossings in a manner which avoids and/or minimizes land acquisitions and relocations of residential and commercial Historic Properties to the extent feasible and with due regard for public safety, MBTA's operational requirements, cost and maintenance.

C. At those at-grade crossings which are identified in the MBTA's Project Plans (see CE&M Report, Appendix D) and which in the absence of other measures to resolve Adverse Effects would involve Adverse Effects on Historic Properties, the MBTA shall consider using grade crossing treatments which include four quadrant gates, and shall determine whether to use such gate treatments in lieu of alternative, median-barrier treatments based on consideration of factors such as the degree of adverse impact on Historic Properties, the reliability of technology which may be applied in the operation of the crossing and which is then available in the marketplace, the compatibility of such technology with system-wide signal and communications technology applications then in use by MBTA, physical and operational constraints at the particular crossing, the history of accidents at the particular grade crossing and at crossings similarly situated in New England, legal and liability considerations, and with due regard for the safety of the public, including train passengers and personnel as well as those persons seeking to cross the rail right of way.

D. The MBTA's ultimate determination (see Paragraph C, immediately above) whether to include four quadrant gate treatment at any grade crossing in the Project's final design and engineering will be made as follows: first (1), the MBTA shall determine whether the safety and other considerations set forth at Paragraph C, immediately above, are satisfactorily resolved in the use of a particular treatment at each such crossing and second (2), if MBTA makes the first determination affirmatively, it shall determine whether the selected treatment is consistent with FRA and other regulations which are then current and applicable as of the date of construction of the Project (it being acknowledged that with respect to this requirement, the MBTA shall seek a waiver of requirements of federal or state regulations if the first determination is made affirmatively and if a waiver would otherwise satisfy the requirements of then applicable FRA or other federal or state regulations applicable to such crossing). The MBTA shall notify the Corps, SHPO, the Towns and the Project Conservator regarding the determination it ultimately makes regarding these grade crossing treatments.



V. MEASURES TO RESOLVE NOISE AND VIBRATION ADVERSE EFFECTS

- A. The MBTA shall continue to design the layover facility so that it is located at the end of the line in order to avoid late night and early morning noise and vibration impacts from moving empty trains ("deadheading") to their overnight storage location.
- B. The MBTA shall continue to design the Project with continuously welded rail and resilient track fastening devices to minimize noise and vibration from train operations.
- C. Bells at automatic grade crossing gates shall be sounded only when the gate is moving, and shall be deactivated when the gate is down in order to minimize noise impacts of the operation of such gates.
- D. All railroad bridges shall be constructed with ballasted decks to reduce noise and vibration which may affect Historic Properties.
- E. At certain locations adjacent to Historic Properties and shown in the CE&M Report (see Appendices A and D), noise walls are included in partial mitigation of noise impacts. In the event that these noise walls are changed materially, or in the event that additional noise walls are planned in the future, the MBTA shall notify and consult with the Project Conservator and will also notify the Corps and SHPO; the appropriate archaeological survey(s) will be conducted (see Stipulation XIII of this Agreement); and the results, including any comments of the Project Conservator, will be coordinated with Corps and SHPO.
- F. All sub-ballast (gravel base) and ballast (the crushed rock under the tracks) will be replaced along the entire length of the Project with the depth of new material established by MBTA standards to reduce transmission of vibration from the tracks to the ground.
- G. Vibration dampening treatments will be applied to the main track(s) at locations adjacent to Historic Properties (buildings) where vibration levels from operation of trains are projected by MBTA to equal or exceed the Federal Transit Administration's (FTA) "Impact" level (such projections having been made, as set forth in the CE&M Report, in accordance with the FTA's Noise and Vibration Impact Assessment Manual (*FTA Manual*)).
- H. Sound insulation or other measures to resolve noise impacts will be applied to Historic Properties (buildings) at locations where noise levels from operations of trains are projected by MBTA to exceed the FTA "Impact" level (such projections made in accordance with the FTA Manual). The nature of such sound insulation treatments will be determined in coordination with the property owner subject to the maximum cost-justified amounts for each impacted property in accordance with the

MBTA's Greenbush Line Noise Mitigation Guidelines as described in the CE&M report at Appendix G.

I. If, during the completion of design, projections of noise or vibration levels at certain Historic Properties (buildings) change due to modifications in the design of the Project (such as train speeds or track locations relative to such buildings), the extent and type of the measures to resolve Adverse Effects due to noise or vibration to be included in the Project shall be modified in accordance with revised projections made per the FTA Manual, and such modifications shall be reflected in the appropriate Design Submissions called for under Stipulation VIII, below.

J. If, during design, it is determined, after further analysis, that a noise wall proposed in the CE&M Report as a measure to resolve, in whole or in part, a Noise Adverse Effect at a particular Historic Property, will be materially ineffective in achieving the level of reduction projected for such Properties, sound insulation treatments shall be provided at such Properties in accordance with revised projections made per the FTA Manual accounting for the actual noise reduction projected to be afforded by such noise wall and subject to the MBTA's Greenbush Line Noise Mitigation Guidelines as described in the CE&M report at Appendix G, and such modifications shall be reflected in the appropriate Design Submissions called for under Stipulation VIII, below.

K. If, after construction is complete and revenue passenger service is underway, a noise wall incorporated as a measure to resolve Noise Adverse Effects of the Project at a particular Historic Property building is determined, after further analysis, to be materially ineffective with reference to the noise levels projected for such Properties, sound insulation treatments shall be provided at such Properties in accordance with revised projections made per the FTA Manual accounting for the actual noise reduction projected to be afforded by such noise wall, subject to the MBTA's Greenbush Line Noise Mitigation Policy as described in the CE&M report at Appendix G.

## **VI. TRAFFIC AND ACCESS MITIGATION**

A. During the completion of the plans and specifications for the Project, the MBTA shall continue to design the Project such that the existing ability to make both right and left turns from driveways is retained to the extent feasible and with due regard for public safety, MBTA's operational requirements, cost and maintenance. Without limitation of this provision, MBTA shall design any center medians at grade crossings to the minimum length permitted under then applicable or proposed FRA regulations where Historic Properties may otherwise be Adversely Affected by longer median barriers.

B. During the completion of Project design and engineering, MBTA shall continue to design the Project so as to minimize traffic queues at grade crossings to

the extent feasible and with due regard for public safety, MBTA's operational requirements, cost and maintenance.

C. Historic pedestrian access routes will be maintained to the extent feasible, with due regard for public safety, MBTA's operational requirements, cost and maintenance, and where existing grade crossings are proposed for closure, MBTA shall include in the appropriate Design Submissions (see Stipulation VIII) alternative pedestrian access across the right-of-way.

D. The MBTA shall cooperate with the Towns in which the Project is located in connection with local enforcement of traffic and parking regulations designed to minimize Adverse Effects on Historic Properties arising from commuter parking at locations other than MBTA-authorized off-street parking at stations.

## **VII. MEASURES TO RESOLVE VISUAL AND SETTING ADVERSE EFFECTS**

A. During the completion of Project design and engineering, MBTA shall continue to design the Project so that the existing rail right-of-way is utilized to the extent feasible so as to preserve community cohesion, with due regard for public safety, MBTA's operational requirements, cost and maintenance.

B. During construction and future maintenance of the rail corridor, unnecessary clear-cutting of trees and vegetation that would have an adverse visual impact on Historic Properties will be avoided and existing trees and vegetative screening will be retained to buffer visually Historic Properties from the rail line, to the extent feasible and with due regard for public safety, MBTA's operational requirements, cost and maintenance. It is understood that clearance of vegetation within fifteen feet of each side of the center line of any track within the right of way is necessary at a minimum.

C. MBTA shall cause its design contractor to provide reasonable documentation of existing trees and vegetation which otherwise serve as significant visual screening and which will be removed as part of the construction of the Project. Such documentation shall indicate whether trees or vegetation to be removed will be replaced in whole or in part (such as in so-called "infill" areas). The MBTA shall review such documentation with the Project Conservator prior to removal of vegetation and shall provide a copy of same (together with the comments, if any, of the Project Conservator) to the Corps, SHPO, and the Towns prior to removal of such vegetation.

D. A review of current landscaping conditions and materials will be undertaken by MBTA in order to assure the use of compatible materials in the vicinity of Historic Properties.

E. To the extent feasible, grade crossings medians will be bounded with granite curb and include an optional planting area, similar to those already present at many

intersections in the project area.

F. Where the Project Plans call for installation of new wood fencing or landscape plantings, individually or in combination, these elements will be introduced along the right-of-way adjacent to Historic Properties with the goal to form a reasonable visual screen and to be compatible with the character of the area. Existing style of fences (solid or chain link) will be taken into account and augmented, rather than replaced to the extent feasible. Wood fencing is proposed at locations where screening of the right of way is called for and there is not sufficient room for screening with plants.

G. Specific details of site-specific landscaping treatments proposed by the MBTA will be included in the Design Submissions prepared by the MBTA (see Stipulation VIII, below). In determining which treatments to provide, the MBTA shall take into consideration the specific comments received regarding plantings at particular Historic Properties during the Section 106 consultation prior to this Agreement. If the MBTA determines in its review with property owners where plantings are proposed that a fence would be preferable, a wooden fence at that location will be proposed. Where site-specific treatments call for plantings, the MBTA, in coordination with the Corps, shall monitor the plantings for a period of three years following installation. If the Corps, in coordination with SHPO, the Towns and MBTA, determines during this three year period that replanting of defective plantings is necessary, the MBTA shall cause such replantings to be performed as promptly as possible.

## VIII. DESIGN REVIEWS

A. MBTA shall prepare, in coordination with the Project Conservator, and submit for review and comment to the Corps, the SHPO and the Towns (together with the comments, if any, of the Project Conservator), documents setting forth the design of various elements of the Project (consistent with practical requirements associated with a design-build or other alternative contracting arrangements that MBTA may undertake for the Project) which represent approximately sixty percent (60%) of the engineering progress on such elements and also which represent approximately ninety percent (90%) of such development (both of which are referred to herein as "**Design Submissions**"). The MBTA may prepare these Design Submissions in groups representing practical segments or construction contracts, and if an alternative arrangement such as design-build is utilized, at such progress milestones for various elements as may be practicably necessitated in accordance with such arrangement.

B. In the event that the SHPO, the Towns, the Project Conservator or the Corps advises the MBTA, in a timely manner as required under Stipulation XVI.A of this Agreement, that a Design Submission, in whole or in part, does not adequately resolve Adverse Effects to Historic Properties with reference to the scope of measures provided for in the CE&M Report or under the terms of this Agreement, and provides specific comments identifying such deficiencies (**Deficiencies**), MBTA shall take such Deficiencies into account and shall either agree to implement corrective actions

in accordance with the direction of the Corps or shall attempt in good faith to resolve with the Corps and SHPO any disagreement regarding such Deficiencies.

C. In the event that MBTA and either the Corps or SHPO are unable to resolve the matter, the MBTA, Corps or SHPO may refer the matter for Dispute Resolution as provided below at Stipulation XV of this Agreement.

D. The MBTA shall not start construction on the segment(s) or element(s) included in a Design Submission until the parties set forth at Paragraph B, above, have had, in accordance with Stipulation XVI.A, the opportunity to comment on such Design Submissions. The MBTA may proceed with the further design or with construction, as the case may be, of any such segments or elements for which the Project Conservator, SHPO and the Corps has commented that there are no Deficiencies (or as to which the time for comment has expired without substantive comment) even though review of any other segments or elements may be pending.

E. The SHPO, Corps, and the Towns shall make every reasonable effort to make comments about any major Historic Property design concerns with respect to the Project segments or elements covered in a Design Submission at the time of the Submission which represents approximately 60% of the engineering progress as such segments or elements. If such comments are timely provided in accordance with Stipulation XVI.A, the MBTA shall ensure that the 90% Design Submission for such segment or element shall take into account any such major comments. When the final design or engineering documents for such Project segment or element are completed for purposes of initiating construction of such segments or elements, the MBTA shall make them available for inspection by the Corps, SHPO, the Towns and Project Conservator prior to commencement of construction, and shall provide to the consulting parties written responses to comments on the corresponding 90% Design Submission.

#### **IX. IMPLEMENTATION OF MEASURES TO RESOLVE ADVERSE EFFECTS IN THE CE&M REPORT**

A. Subject to the provisions of this Stipulation IX, MBTA shall ensure that the final design and engineering documents for the Project incorporate the measures to resolve Adverse Effects for Historic Properties that are identified in the CE&M Report at Appendices A (Location-Specific Mitigation) and D (Project Plans).

B. MBTA may modify the Project Plans (see Appendix D of the CE&M Report) in order to provide measures to resolve Adverse Effects at least equally or more protective of Historic Properties than those which may be depicted in such Plans, provided that such modifications are reflected in the sixty and ninety percent Design Submissions for the Project segments or elements covered by such Submission under Stipulation VIII, above, or are otherwise submitted (together with the comments, if any, of the Project Conservator) to the Corps and SHPO for review and comment

prior to their incorporation in the final Project design and engineering documents.

C. Without limitation of the provisions of Stipulation IX. B, immediately above, the MBTA shall coordinate further with the Corps, SHPO, Project Conservator and the Towns regarding the Adverse Effects on Historic Properties described in the CE&M Report and regarding potential additional or alternative measures to resolve such Adverse Effects associated with the Project elements identified below in this Paragraph C:

- 1) Final location of the Greenbush Line terminus and layover in Scituate.
- 2) Final determination by MBTA regarding grade crossing treatments under Stipulation IV.C of this Agreement.
- 3) Design of the Route 3A/Driftway roundabout intersection in Scituate.
- 4) Design of station, associated parking, crossings and roadways at Weymouth Landing, including Quincy Avenue in East Braintree.
- 5) Design of the crossing at Rocky Lane in Cohasset.
- 6) Design of the crossings, roadways and certain replacement parking in Cohasset Village, Egypt, certain intersections in Hingham referenced as "improvements to be determined" on the Project Plans, and North Scituate Village.
- 7) Measures to resolve Adverse Effects at the Cohasset Railroad Roundhouse Site in Cohasset Village.

The resolution of the design of these Project elements shall be reflected by the MBTA in the appropriate Design Submissions or otherwise shall be submitted (together with the comments, if any, of the Project Conservator) to the Corps, SHPO and Towns for review and comment prior to their incorporation in the final Project design and engineering documents. If the Corps and SHPO, in coordination with the Towns and considering any public comments received, determine that any design modifications proposed by the MBTA under this Paragraph C require further coordination or consultation due to the potential for new or additional Adverse Effects on Historic Properties arising out of such modifications, the Corps shall insure that this additional coordination or consultation takes place prior to the completion by MBTA of the final Project design and engineering documents.

**X. ROLES AND RESPONSIBILITIES OF VARIOUS SECTION 106 PROCESS PARTICIPANTS**

The following are the major roles and responsibilities of the participants in the Section 106 process for this Undertaking in the implementation of this Agreement:

- A. As the federal **Agency Official** under the Advisory Council's regulations (36 C.F.R. 800) as well as the Corps' regulations implementing Section 106 at 33 C.F.R. Part 325, Appendix C, the Corps has the statutory obligation to fulfill the requirements of Section 106, has ultimate approval authority for the Undertaking and has the authority to enforce the terms and conditions of its Section 404 Permit, of which this Agreement is a part, in accordance with the Clean Water Act. Under the terms of this Agreement, the Corps will provide oversight, coordinate with SHPO and MBTA, monitor the implementation of this Agreement by MBTA and further evaluate effects of Project activities such as those set forth at Stipulation IX.C.
- B. Having been invited by the Corps to participate directly as a consulting party in connection with Section 106 review for this Undertaking and having consulted with and commented to the Corps as Agency Official on this Undertaking and on its effects on Historic Properties, the **Advisory Council** will have a continuing role in the circumstances set forth in this Agreement, including reviewing various status reports called for under this Agreement, participating in dispute resolution (see Stipulation XV), and advising the Corps, SHPO and MBTA of any compliance issues that may be raised by the public to the Advisory Council.
- C. The **State Historic Preservation Officer**, or SHPO, serves in accordance with Section 106, with the Advisory Council's implementing regulations and with Massachusetts law (including the Massachusetts Historical Commission Act) to reflect the interests of the State and its citizens in the preservation of their cultural heritage. In accordance with Section 101(b)(3) of the NHPA, and the terms of this Agreement, the SHPO will advise and assist the Corps and the MBTA in carrying out their responsibilities under this Agreement, including coordinating with the Corps and MBTA in the review of design documents and the various status reports during and after construction of the Project as called for under this Agreement; coordinate with the Project Conservator with regard to the Conservator's recommendations concerning the implementation of this Agreement; and monitor the impacts of measures to resolve Adverse Effects on the integrity of Historic Properties.
- D. Having invited the participation of **Indian tribes** in the Section 106 process for this Undertaking (see Section 101(d)(6)(B) of the NHPA) that may attach religious or cultural significance to Historic Properties that may be affected by the proposed Undertaking, and that may be located within tribal ancestral lands (in the case of this Undertaking, there are no tribal lands within the APE), the **Tribal Historic Preservation Officer** (THPO) (appointed or designated in accordance with the NHPA as the official representative of his or her Indian tribe) will continue to have the opportunity to consult regarding the Project's effects on Historic Properties

on tribal ancestral lands, specifically with reference to archaeological sites which may become involved as the Project design is advanced.

E. As the Project proponent and permittee of the Corps Section 404 Permit for this Undertaking, and having served both as a consulting party and, in furtherance of the authority provided under both the Corps' regulations and the Advisory Council's regulations (see, e.g., 36 C.F.R. 800.3(b) and 800.11(b)) as a source of information and documentation regarding the Undertaking, the MBTA shall continue to perform the planning and design of the Undertaking and shall have the principal responsibility for implementing the provisions of this Agreement, including the resolution of Adverse Effects documented in this Agreement and the preparation of design submissions which will be the subject of further coordination and review under this Agreement (see, e.g., Stipulations VIII and IX)

F. The representatives of local governments in whose jurisdiction the Undertaking will occur, including the Towns of Braintree, Cohasset, Hingham, Scituate and Weymouth, having been invited by the Corps to participate as consulting parties in the Section 106 process leading to this Agreement, will continue to have the opportunity to submit further comments to the Corps, SHPO, MBTA and Advisory Council at various points in the Project design and construction process as provided in this Agreement (see, e.g., Stipulations VIII and IX); continue on-going discussions directly with the MBTA, as Project proponent and Section 404 Permittee regarding the Project's effects and Adverse Effects on Historic Properties as well as on the Project's environmental impacts generally; coordinate with the Project Conservator (see e.g., Stipulation XI.C.); have the opportunity to participate in any further consultations with respect to Historic Properties within the Town that may occur; and if a signatory to this Agreement, participate in the process regarding any amendments to this Agreement which may be advanced during its implementation (see Stipulation XXII. A.) and regarding any proposed extension of the Term of this Agreement (see Stipulation XXII.B.).

G. The general public will continue to receive periodic reports and information concerning the completion of the Undertaking, including its effects on Historic Properties, and measures to resolve Adverse Effects and will continue to have the opportunity to provide the views of the public regarding the implementation of this Agreement (see, e.g., Stipulation XVII).

## XI. PROJECT CONSERVATOR

A. Promptly following completion by the Corps and MBTA of environmental reviews under applicable provisions of NEPA, the Clean Water Act and MEPA, the MBTA shall appoint and be responsible for the compensation of a Project Conservator ("*Project Conservator*" or "*Conservator*"). The Conservator shall meet the National Park Service's standards set forth at 36 C.F.R. Part 61 regarding qualifications for preservation professionals and either he/she or any other



professional(s) serving with him/her shall meet such standards in the areas of architecture, architectural history, historic preservation and archeology. In the selection of the Conservator, the MBTA shall use its standard consultant hiring procedures. The Corps and SHPO shall review and approve (1) the Request for Proposals for the Project Conservator prior to the release of such RFP, (2) the qualifications of the final candidates under consideration by the MBTA prior to the final selection of the Conservator by the MBTA, and (3) the scope of work of the Conservator to be included in the MBTA's contract with the Conservator, in order to ensure that the Conservator's duties and responsibilities are consistent with the provisions of this Stipulation XI. Upon making its selection of the Project Conservator, the MBTA shall provide written notification thereof to the Corps, SHPO, Advisory Council and Towns.

B. The Project Conservator shall serve during the design and construction process for the Project and during the balance of the initial Term of this Agreement (see Stipulation XXII.B). Following such initial Term, the Conservator shall continue to perform the Conservator's responsibilities hereunder for any period to be determined by the Corps and SHPO in coordination with MBTA, but not to exceed the extended Term (if any) of this Agreement.

C. The Project Conservator's principal task shall be to monitor and assess compliance by the MBTA with this Agreement, specifically, the implementation of the measures to resolve Adverse Effects stipulated herein (refer specifically to the CE&M Report at Appendix A). It is understood that the MBTA shall continue to engage, as part of its Project design team, consultant(s) which have professional qualifications meeting National Park Service professional standards in the areas of historic preservation, architecture, architectural history, and archeology, and that the MBTA shall continue to be responsible for the performance of further studies, evaluations and other tasks required to meet the Stipulations set forth in this Agreement. In this context and consistent with the independent monitoring and advisory role assigned to the Project Conservator under this Agreement, the Conservator shall perform the following responsibilities:

- 1) Meet and confer on a regular basis with the MBTA's design contractor(s) to review, evaluate and comment on the development by MBTA of Project design and engineering documents with respect to Historic Properties concerns, including, but not limited to, the Design Submissions called for under Stipulation VIII of this Agreement, and any Project Changes that may arise under the terms of Stipulation X, above. Upon the MBTA's request, the Project Conservator shall promptly provide to MBTA the Conservator's comments, if any, on the Design Submissions or other submittals which MBTA is required to make to the Corps, SHPO and Towns under this Agreement.
- 2) Monitor the MBTA's compliance during the design and construction process

for the Project of the special Historic Preservation Design Guidelines referred to in the CE&M Report at Chapter 5, Stipulation C.

- 3) Monitor and assess the need for any additional work related to any future archeological investigations and/or unanticipated discoveries during construction (see Stipulations XIII and XIV of this Agreement regarding Protection of Archaeological Resources and Unanticipated Discoveries of Historic Properties) and if the Conservator identifies such need, make recommendations to the Corps, SHPO and MBTA regarding same.
- 4) Monitor work performed on Historic Properties with respect to measures to resolve Adverse Effects due to noise and vibration under this Agreement.
- 5) Coordinate regularly with the Corps and SHPO in connection with the Conservator's observations and recommendations regarding the progress of the Project in implementing measures to resolve Adverse Effects called for under this Agreement.
- 6) Submit semi-annual reports concerning the progress of the Project in the implementation of the Stipulations set forth herein to the MBTA, Corps, Advisory Council, SHPO and the Towns in which the Project is located, with copies available to any other interested party who so requests.
- 7) Coordinate regarding the effects of the Project on Historic Properties, as regularly as is reasonably possible, with (a) owners of Historic Properties within the APE regarding the effects of the Project, if any, on those Properties; (b) historic commissions which are duly constituted and serving within the Greenbush Corridor localities; (c) elected officials serving within those localities (or those duly appointed by them and authorized to act on their behalf) and (d) other interested private parties who have a demonstrated interest in, and history of association with, the protection of historic preservation values in the affected communities, and coordinate with such persons regarding the effect of projects and programs that may be undertaken by others (e.g. a Town) that may have potential impact on the implementation of the measures to resolve Adverse Effects required under this Agreement.
- 8) Report to the MBTA, the Corps and SHPO concerning the existence, if any, of previously unidentified Adverse Effects of the Project on Historic Properties (that is, Adverse Effects which are not otherwise materially identified in the CE&M Report at Attachment A to this Agreement and for which measures to resolve such Effects has not already been proposed), including the nature and magnitude of any such unanticipated Adverse Effect and the potential measures that may be available to resolve such Effect.
- 9) In addition to the informal conferences and meetings which the MBTA and

Conservator will hold in the normal course of development in the Project's design and engineering, meet and confer formally with MBTA reasonably promptly upon the written request of either the MBTA or the Project Conservator, regarding any recommendations made in writing by the Conservator and MBTA's response to such recommendations. If, following such formal conference, the MBTA and the Conservator reach consensus regarding the appropriate resolution of the Conservator's recommendations, MBTA shall document the consensus it has reached with the Conservator in a letter which shall be submitted for the record for review and comment to the Corps and SHPO, with copies to the appropriate Town(s). Subsequent to the Corps' approval, the MBTA shall implement the actions incorporated in such letter.

- 10) In the event that this coordination does not conclude in a consensus determination acceptable to the MBTA, the Corps and SHPO regarding such recommendations and the potential measures to resolve Adverse Effects, the MBTA, Corps or SHPO may refer the matter for Dispute Resolution in accordance with Stipulation XV of this Agreement.

## **XII. CONSTRUCTION ACTIVITIES PLANNING AND MANAGEMENT**

A. The MBTA shall cause its contractor to prepare, in consultation with the Project Conservator, a written Construction Management Plan which summarizes how the measures applicable to construction period management as required in this Stipulation XII shall be implemented.

B. The MBTA shall submit this Plan, together with the comments of the Project Conservator, if any, in advance of the commencement of construction to the Corps, SHPO and Towns in which such construction is located for their comment. The MBTA shall consider any comments timely received as provided in Stipulation XVI.A.

C. Once approved by the MBTA, the Plan shall be forwarded to the Corps and SHPO and shall also be available for inspection at the offices of the MBTA by any interested person making a request therefore.

D. The Construction Management Plan shall include the following measures to resolve Adverse Effects, which shall be in place prior to the commencement of construction:

1. Historic Properties adjacent to the railroad right of way and other Project construction areas shall be protected from damage due to construction activities through implementation of the following protective measures:

a. Inspection and documentation, including still photography and/or

video taping, of the condition of all properties adjacent to all Project construction areas prior to the start of construction activities in accordance with MBTA Standard Construction Specifications.

- b. Inspection and evaluation during final design of building foundations immediately adjacent to slurry walls or excavations requiring shoring for support (collectively "Deep Excavation"), and if indicated by such inspection and evaluation, repair or stabilization of such foundation(s) in accordance with the U.S. Interior Secretary's Standards prior to the start of such Deep Excavation to minimize the possibility of "slight" or greater damage (as such terms are defined by Boscardin & Cording, in "Building Response to Excavation-Induced Settlement" included in the CE&M Report at Appendix K.1) to such foundations resulting from excavation-induced settlements (referred to below as "Damage").
- c. Geotechnical monitoring of buildings within the area adjacent to a Deep Excavation where the excavation activity may produce settlements (specifically, the area within a horizontal distance from the edge of a Deep Excavation equal to twice the depth of such excavation - referred to as the Zone of Influence for Deep Excavation). Where the Deep Excavation at a particular location requires dewatering, the Zone of Influence for Deep Excavation shall be extended as appropriate to include the area of ground water draw down determined through the use of groundwater monitoring wells installed prior to the commencement of dewatering activities and geotechnical monitoring of Historic buildings within that additional area shall be provided. Such geotechnical monitoring shall be designed to detect building movements in real time before Damage is caused. If significant building movements are detected, construction activities shall be modified as necessary to prevent Damage from occurring.
- d. Where blasting or other construction activities generating potentially damaging levels of vibration occurs, vibration monitoring of Historic Properties (buildings) shall be performed within an area to be determined prior to the commencement of production blasting or of such other construction activities (the extent of such zone depending on the nature of each such construction activity) to ensure that vibration levels at such buildings do not exceed the relevant limits specified in the "New Swiss Standard" (as referenced by Wiss in "Construction Vibrations: State of the Art" included in the CE&M at Appendix K.2).
- e. Repair of any Damage to Historic Properties adjacent to Project construction areas caused by the MBTA construction activities described above shall be performed at no expense to the property

owner. All such repairs shall be in accordance with the U.S. Interior Secretary's Standards.

2. The MBTA shall coordinate with the Project Conservator in the location of staging areas in protected locations outside Historic Properties (districts) wherever possible, and in as unobtrusive a location as possible within Historic Properties if alternate locations are infeasible. Locations of staging and storage areas and other areas that may be impacted by construction activities and which have not been previously identified in MBTA's Project Plans or Design Submissions shall be reviewed by MBTA with the Corps, SHPO, the affected Town and the Project Conservator with regard to potential effects on Historic Properties. Staging area fencing shall be chain-link fence where Historic Properties used as residences are more than fifty feet from the staging area. Where such residences are less than fifty feet from the staging area, a temporary solid wood fence, six feet in height, shall be used as a solid visual screen.
3. Dust and debris shall be carefully controlled, contained and disposed of properly according to environmental regulations and consistent with MBTA Standard Specifications for construction, January 1980 or current edition ("Standard Specifications"). Trucks and equipment shall have wheel washes and load covers as required to protect Historic Properties. Noise from construction activities shall be limited in accordance with the Standard Specifications and the Construction Noise Criteria described in CE&M Appendix G (MBTA Greenbush Line Noise Mitigation Guidelines, November, 2000).
4. Restrictions on hours and locations for construction activities, including location of staging areas in the vicinity of sensitive Historic Properties, shall be described in the construction documents.
5. Plans for traffic management during construction (including construction vehicles and equipment) shall be cooperatively developed by the MBTA with each Town.
6. The Construction Management Plan for the Project will include provisions to protect certain commercial areas, such as Weymouth Landing, Hingham Square, Cohasset Village and North Scituate, to the extent that economic viability during construction of the Project may be a material concern with regard to Historic Properties. These plans will specify measures to resolve Adverse Effects, such as signage, construction scheduling, staging area controls, parking plans, construction vehicle traffic management, prevention of structural subsidence, and controls on construction-generated noise, vibration, dust, and visual impacts where feasible and practicable.

### **XIII. PROTECTION OF ARCHAEOLOGICAL RESOURCES**

A. For those below-ground areas impacted by the Project which have not been included in the archaeological investigations and reports previously conducted, (see *Attachment C* to this Agreement), including, but not limited to, areas where modifications to Project plans and specifications may occur during the completion of the design process or during actual construction (such as, for example, changes in or additions to Project staging areas), MBTA shall:

1. Submit information on the location of new project areas to the Corps who shall, in consultation with the SHPO and State Archaeologist, determine the need and scope for an archaeological identification survey.
2. Perform an identification survey and evaluation in a manner consistent with the Secretary of the Interior's Standards and Guidelines for Identification (48 FR 44720-23) and the Massachusetts State Archaeologist's permit regulations (950 CMR 70) and in doing so, shall take into account the National Park Service publications, *The Archeological Survey, Methods and Uses*, and the Advisory Council's publications *Consulting About Archaeology Under Section 106*, and *Treatment of Archeological Properties: A Handbook*. A report of such survey shall be submitted to the Corps, SHPO, State Archaeologist, THPO (if appropriate), and Project Conservator for their review and timely comment as set forth at Section XVI.A of this Agreement.
3. If such survey results in the identification of an Historic Property, a plan for in-place preservation shall be considered.
4. If such preservation is not feasible, a Data Recovery Plan (DRP) following the Secretary of the Interior's Standards and Guidelines for Archeological Documentation shall be developed and submitted to the Corps, SHPO, State Archaeologist, THPO (if appropriate) and Project Conservator for review and comment. Such DRP shall ensure that all archaeological materials recovered from such sites will be curated at an appropriate curatorial facility in a manner consistent with the U.S Interior Secretary's regulations at 36 C.F.R. Part 79.
5. As provided for in Stipulation XVI.A, in the absence of receipt of written comments from the reviewers citing material deficiencies in such submission, the MBTA shall implement the DRP.

B. The MBTA shall consult with the Corps, SHPO, State Archaeologist, and THPO (if appropriate) to identify suitable avoidance and/or mitigation measures to resolve Adverse Effects to those archaeological resources referred to above in Paragraph A, Sections 3, 4, and 5.

#### XIV. UNANTICIPATED DISCOVERIES OF HISTORIC PROPERTIES.

- A. In the event that previously unidentified historic or archaeological resources are discovered which may be affected by the Project in accordance with the criteria of Adverse Effect under 36 C.F.R. Part 800, the MBTA shall promptly notify the Corps, SHPO, State Archaeologist (when archaeological resources are involved), the relevant Town and Project Conservator, coordinate with the Project Conservator regarding same, and submit to these parties a written report evaluating the historic or archaeological resource for purposes of determining eligibility for inclusion in the National Register of Historic Places.
- B. The Corps, SHPO, State Archaeologist (with respect to archaeological resources) and MBTA will consult promptly on the eligibility of the resources and the Corps, in consultation with SHPO, will promptly determine whether any such resources are Historic Properties subject to protection under 36 C.F.R. Part 800. If an affirmative determination is made by Corps, the MBTA shall promptly thereafter consult with the Project Conservator and submit to the Corps, SHPO and the relevant Town a written report describing the nature of the Effects which the Project will have on the particular Historic Properties, alternatives for the measures to resolve such newly identified Adverse Effects to such Properties, and the measures to resolve Adverse Effects which MBTA proposes to include as part of the Project's design and engineering documents with regard to such Properties, together with the Project Conservator's comments, if any.
- C. The Corps, SHPO and Town shall have the opportunity to comment on such submission. In the event that the Corps, SHPO or the Town return to MBTA, in a timely manner (see Stipulation XVI.A.), comments identifying material Deficiencies in MBTA's report, MBTA shall take the same into account and shall either agree to implement corrective actions in accordance with the direction of the Corps or shall attempt in good faith to resolve any disagreement regarding such Deficiencies with the Corps or SHPO.
- D. In the event that MBTA and either the Corps or SHPO are unable to resolve the matter, the MBTA, Corps or SHPO may refer the matter for Dispute Resolution as provided below at Stipulation XV of this Agreement.
- E. MBTA shall ensure that in responding to previously unidentified discoveries, the protocol developed in consultation with SHPO and attached hereto at *Attachment D* is followed.
- F. The MBTA shall ensure in that if any human burial remains are identified during construction activities associated with the undertaking, work will cease immediately and the procedures under Massachusetts General Laws, Chapter 8, Section 6B; Chapter 9, Section 27C; and Chapter 7, Section 38A; and the Native Americans Graves Protection and Repatriation Act of 1990 (NAGPRA - 25 U.S.C.

3001-13) will be implemented, as further described at Section F, below. MBTA shall insure that in responding to the discovery of any such burial remains, the protocol developed in consultation with SHPO and attached hereto at *Attachment E* is followed.

## **XV. DISPUTE RESOLUTION.**

A. If the SHPO or the Corps make a timely objection (see Stipulation XVI.A, below) to a Design Submission made under Stipulation VIII of this Agreement, or if MBTA, SHPO or the Corps request formal dispute resolution with respect to any other material issue of noncompliance with this Agreement, and in either such case, with specific reference to the Stipulation or Stipulations applicable hereunder, the MBTA, SHPO and the Corps shall consult one time further, in good faith, to attempt to resolve the subject matter of such dispute prior to undertaking formal dispute resolution in accordance with the remaining provisions of this Stipulation XV.

B. Following such further consultation, the Corps shall determine as promptly as possible whether such objection on other issue has been satisfactorily resolved, and if not, the Corps shall forward within fifteen (15) calendar days of the Corps' determination in this regard all documentation relevant to the dispute to the Advisory Council, including, if appropriate, an amendment to this Agreement reflecting the Corps' proposed resolution of the dispute, and request that the Advisory Council act on such dispute in accordance with 36 C.F.R. Part 800.

C. Within thirty (30) calendar days after receipt of all pertinent documentation, the Advisory Council's Executive Director shall either:

1. Provide the Corps, SHPO, Project Conservator and MBTA with recommendations, which the Corps, as Federal Agency Official, shall take into account in reaching a final decision regarding the subject matter of such dispute; or
2. Notify the Corps, SHPO, Project Conservator and MBTA that the Advisory Council will comment pursuant to 36 CFR 800.6 and promptly (not later than fifteen (15) additional days) provide such comment in writing to the Corps, with copies to SHPO, the Project Conservator, the MBTA and any other Concurring Party executing this Agreement. Any such comment by the Advisory Council provided in response to such request shall be taken into account by the Corps, as federal Agency Official, in accordance with 36 C.F.R. Part 800 (Section 800.6(c)(2)) with reference to the subject matter of such dispute.
3. Failure by the Advisory Council's Executive Director to respond within 30 calendar days of a receipt of such documentation shall be



deemed to constitute approval of the Corps' proposed resolution of the dispute.

D. Any recommendations or comments provided by ACHP pursuant to this Stipulation XV shall be understood to pertain only to the particular subject matter of such dispute. The responsibility and authority of the Corps and of the MBTA to carry out all other actions and activities under this Agreement that are not the subject of the dispute shall remain unaffected.

#### **XVI. COORDINATION OF REVIEWS.**

A. The Corps, SHPO, Project Conservator and Towns responsible for reviewing and commenting on Design Submissions, or on other submissions or requests made by MBTA under this Agreement, shall be delivered to MBTA within thirty (30) calendar days of receipt from MBTA of the submissions or requests, unless an alternative timetable in any particular instance is agreed upon in writing by MBTA. Failure by the Corps, SHPO, Project Conservator or Towns to provide written comments within said 30 day period shall be considered for purposes of this Agreement to be concurrence with such submission or request. The MBTA may proceed with the action(s) which were the subject of such submission or request after documenting for the record the expiration of the comment period.

B. Comments by Corps, SHPO, Conservator or Town regarding MBTA's compliance with this Agreement shall be guided by the CE&M Report and the measures to resolve Adverse Effects described therein, except with respect to any specific additional or alternative measures to resolve Adverse Effects items that may be developed in accordance with Stipulation IX, Paragraphs B and C of this Agreement, as to which it is understood that further information on potential measures to resolve Adverse Effects will be provided by the MBTA.

C. MBTA shall insure that its design consultants and construction contractors, including, as appropriate, its contractor under any Design Build arrangement which may be undertaken by MBTA, are informed regarding the coordination procedures and other Stipulations set forth in this Agreement.

D. To the maximum extent feasible, all reviews required under this Agreement shall be coordinated with other federal, state and local reviews, including, but not limited to, the MEPA environmental impact review and any environmental impact review documentation prepared by the Corps with respect to NEPA compliance. In the event that these reviews suggest modifications to the Project with which the MBTA concurs, it is expected that MBTA will include such modifications in the Design Submissions called for under Stipulation VIII for purposes of any additional review and comment concerning Historic Properties matters, and that any such modifications shall not be considered "Project Changes" for purposes of Stipulation X of this Agreement.

## **XVII. PUBLIC INVOLVEMENT.**

A. The MBTA shall continue to coordinate with members of the public, including elected and appointed officials and private citizens, through the MEPA environmental review process (concluding with publication and approval of the Final Environmental Impact Report) and following completion of that process, through regular opportunities for public meetings and distribution of informational materials wherein the public can understand and have the opportunity to comment on the progress of the completion of Project design and construction with respect to the implementation of this Agreement. The MBTA shall notify the Corps and SHPO as well as the Project Conservator and the affected Town reasonably in advance regarding any meetings with the public that may involve concerns related to implementation of this Agreement.

B. At any time during the implementation of the Stipulations in this Agreement, should a timely and substantive objection to such implementation be raised in writing by a member of the public to the Corps, SHPO or Advisory Council (with a copy of same being provided at the same time by the objecting party to the MBTA's Director of Design and Construction, Project Conservator and affected Town), the Corps, SHPO or Advisory Council may refer the same to the MBTA, which shall reasonably promptly, but in no event later than thirty (30) calendar days after receipt of such objection, review it and provide to the objecting party the MBTA's response in writing thereto. MBTA shall provide copies of such response to the Corps, the SHPO, the Towns and the Project Conservator.

C. In the event that in the opinion of the Corps, such objection remains materially unresolved after MBTA's response thereto, the Corps and MBTA shall take the objection into account and consult as needed in good faith with the objecting party, the SHPO, the Project Conservator and/or the Advisory Council, as appropriate in the determination of the Corps, in an attempt to resolve the objection.

## **XVIII. RECORDATION OF HISTORIC PROPERTIES**

A. The existing appearance of all Historic Properties adjacent to the railroad right of way shall be documented prior to the start of construction on the Project. The MBTA shall, in consultation with SHPO, evaluate existing photography and other information completed during Project planning as to its adequacy for documenting said appearance in accordance with MHC standards and, if required, the Historic American Buildings Survey/Historic American Engineering Record standards.

B. The scope of any additional photography to document existing appearance will be submitted to the Corps, SHPO, and the MBTA for review and approval prior to being undertaken.

C. Other recordation actions shall focus solely on any identified deficiencies in photography of existing appearances that may need to be addressed.

D. The MBTA shall, in coordination with the SHPO and the Towns, place interpretive signs documenting historic elements of the station and parking areas at the Stations.

#### **XIX. COORDINATION WITH OTHER FEDERAL ASSISTANCE**

A. Where a Town or other appropriate agency of state or local government notifies the Corps, SHPO and MBTA that it intends to apply for federal or state financial assistance for projects for infrastructure, streetscapes, structural rehabilitation or other improvements in a manner supportive of the Historic Properties protection goals of the Project and this Agreement, the SHPO and MBTA shall support such Project to the extent permitted by their respective enabling legislation, including by providing written documentation to the agency administering such funding program concerning the consistency of the applicant's proposed improvement with the Historic Properties measures to resolve Adverse Effects required under this Agreement.

B. In the event that such administering agency is a Federal agency, it may satisfy its Section 106 responsibilities by agreeing in writing to comply with the terms of this Agreement material to its program and notifying the SHPO and Advisory Council accordingly. Similarly, in the event that the administering agency is a Massachusetts agency, it may similarly satisfy its responsibilities under the State Historic Act, Mass. Gen. Laws, Chapter 9, §§26 et seq.

#### **XX. PROJECT MONITORING**

A. During construction of the Project, the MBTA shall submit to the Corps, Advisory Council, SHPO, Project Conservator and Towns (and to any other person who requests a copy of same) semi-annual progress reports summarizing the status of implementation of the measures to resolve Adverse Effects called for under this Agreement, with the last such report to be prepared not later than three months after completion of construction. In the event that any of the above-referenced parties so request, the MBTA shall conduct an informational meeting to obtain comments and suggestions regarding the further implementation of the measures to resolve Adverse Effects under this Agreement.

B. After revenue passenger services have been in operation for a reasonable period of time, not to exceed one year, the MBTA, in consultation with the Project Conservator, will evaluate Project-related noise and vibration levels, using standard procedures and following Federal Transit Administration guidelines for noise and vibration impact assessment and measures to resolve Adverse Effects. For Historic Properties where no measures to resolve noise or vibration Adverse Effects has been provided, should noise or vibration levels exceed applicable thresholds for measures to resolve Adverse

Effects as set forth in the CE&M Report (Chapter 5, Section B.3) and its Appendices (E and H), the MBTA will consult with the Corps, SHPO, and Project Conservator regarding appropriate measures to resolve Adverse Effects.

C. On or before the commencement of the third year of revenue operations of the Project, MBTA shall prepare and submit to the Corps, SHPO, Advisory Council, Project Conservator and Towns (and to any other person who requests a copy of same) a report summarizing the implementation of the measures to resolve Adverse Effects (other than with regard to noise and vibration effects which are addressed at Paragraph B, above) that was ultimately incorporated into the contractual documents for the Project as built, and reviewing the overall efficacy of such measures in achieving their intended goals. Among the matters to be considered in this report will be the efficacy of grade crossing treatments in relation to Historic Properties concerns, and any long-term Adverse Effects that are discernible in specific relation to the Project's operation, that were not anticipated in the CE&M Report and which would not have arisen but for the operation of the Project.

D. With regard to landscape plantings installed as measures to resolve Adverse Effects to Historic Properties, MBTA shall submit to the Corps and SHPO reasonably promptly after the first growing season for such plantings and annually thereafter for the two successive growing seasons following the first such season a monitoring report summarizing the results of the plantings and indicating whether defective plantings have occurred which require replacement as otherwise provided under Stipulation VII. G., above.

## **XXI. EMERGENCY SITUATIONS**

In the event that during construction of the Project, an emergency situation should occur (such as a natural disaster), which represents an immediate threat to public health, safety, life or property creating a hazardous condition in relation to an Historic Property, the MBTA shall notify the Corps, Advisory Council and SHPO of the condition which has initiated the situation and the measures to be taken to respond to the emergency or hazardous condition. The Corps and SHPO may submit additional measures to resolve Adverse Effects within seven days of the notification. Should the nature of the emergency warrant immediate attention, the MBTA shall consult with the Corps and SHPO via telephone or facsimile. Should the SHPO or the Corps desire to provide technical assistance to MBTA in responding to such condition, they shall submit comments within five days from notification, if the nature of the emergency or hazardous condition allows for such coordination.

## **XXII. ADMINISTRATIVE PROVISIONS**

A. Amendments. Any signatory party to this Agreement may request that it be amended by providing notice of such request in writing to the other signatories. In such event, the Corps shall consult with the MBTA, SHPO the Advisory Council and

with any other signatory in accordance with 36 C.F.R. Part 800 to consider such amendment. No such amendment shall be effective unless it is executed by the Corps, SHPO, and the MBTA.

B. Duration of Agreement. This Agreement shall remain in force run during the design and construction of the Project and for the period thereafter which terminates on the end of the first full calendar month following the month which is three (3) years after commencement of revenue passenger operations on the Greenbush Line (*Term*). If the SHPO or the Corps requests that this initial Term be extended, notification of this request shall be made by the Corps or SHPO, as the case may be, to the Advisory Council, MBTA and Towns. The Corps shall consult with the other such parties regarding this matter, and the Term shall be extended for such additional period as may be concurred on by the signatories to this Agreement based on such consultation. In the event that the signatories do not reach consensus on a requested extension, the matter of whether to extend shall be treated as an amendment to be resolved by the Corps, SHPO and MBTA as provided under Paragraph A above.

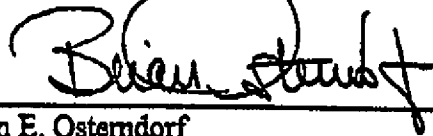
C. Nothing in this Agreement shall be construed to impose on the MBTA any additional liabilities or obligations with respect to the subject matter of the Agreement other than those specifically stated herein, or to relieve the MBTA from complying with all other laws and regulations applicable to it.

\*\*\*\*\*

EXECUTION of this Memorandum of Agreement and implementation of its terms evidences that the Corps has engaged in the consultations required under Section 106, that the Corps has afforded the Advisory Council an opportunity to comment on the Greenbush Line Project and its effects on Historic Properties and that the Corps has taken into account the effects of the undertaking on Historic Properties in connection with the issuance of its Section 404 Permit for the Project in accordance with Sections 106 and 110(f) of the NHPA.

\*\*\*\*\*SIGNATURE PAGES FOLLOW\*\*\*\*\*

UNITED STATES DEPARTMENT OF THE ARMY CORPS OF ENGINEERS



Brian E. Osterndorf  
Colonel, Corps of Engineers  
District Engineer

Feb 28, 2001

date

**MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER**

Brona Simon  
Brona Simon, Deputy State Historic Preservation Officer

2/28/2001  
date

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY



Robert H. Prince, General Manager

2/28/01

date



ADVISORY COUNCIL ON HISTORIC PRESERVATION

*John M. Fowler*

John M. Fowler, Executive Director

3/1/01  
date

# **Old Colony Railroad Rehabilitation Project Greenbush Line Restoration**

## **Section 106 Consultation Programmatic Agreement**

### **Attachments**

- A. Historic Preservation Design Guidelines
- B. Cultural Resources, Section 106 Comprehensive Effects and Mitigation Report, Old Colony Railroad Rehabilitation Project, Greenbush Line Restoration, Public Archaeology Laboratory, Inc., dated February, 2001 and letter from U.S. Army Corps of Engineers dated January 16, 2001.
- C. Archaeological Report References
- D. Procedures Guiding Unanticipated Archaeological Discoveries, PAL, Sept., 2000
- E. Procedures Guiding the Discovery of Unmarked Burials and Human Remains, PAL, Sept. 2000